Information Request DTE-7-1

When each of the NSTAR Electric companies developed its current distribution rates for each rate class, did provisions of the Restructuring Act, such as the rate cap provisions, the requirement for a non-bypassable transition charge, as well as any other provisions, prevent the rates for each rate class to be set at equalized rates of return? Please describe how the current distribution rates were developed for each of the NSTAR Electric companies.

Response

The provisions of the Restructuring Act and the Department's requirements implementing such provisions resulted in distribution rates for the individual rate classes to deviate from the levels approved in NSTAR Electric's last rate cases. The class rates approved in the last rate cases were not necessarily maintained as a result of implementing the provisions of the Restructuring Act.

The distribution rates were developed in the following manner for Boston Edison: For each rate class, (1) the total revenue was determined by applying the 1995 billing determinants to the base rates and 1997 levels for the fuel adjustment charge, the DSM adjustment and other applicable adjustment charges; (2) the total revenue for each rate class was discounted by 10 percent; (3) from those amounts were subtracted (a) the transition revenues derived from the uniform transition charge approved in the settlement in D.P.U./D.T.E. 97-23; (b) the transmission revenues derived from the FERC transmission rate; (c) the mandated standard offer revenues; and (d) the DSM and Renewables revenues derived from the Restructuring Act mandated charges; (4) distribution rates were designed to recover the remaining revenues; (5) all rate components were designed to achieve the 10 percent reduction for each customer bill.

For Cambridge and Commonwealth, the distribution rates were developed by first determining the uniform transition charge to be included in each rate schedule. This was accomplished as follows: (1) the total revenue for each rate case was determined by applying the 1995 billing determinants to the base rates and 1997 levels for the fuel adjustment charge and the DSM adjustment; (2) the total revenue for each rate class was discounted by 10 percent; (3) the distribution and transmission revenue requirements derived from the adjusted 1995 functional cost allocation study and the mandated standard offer revenue were subtracted from the totals; (4) the uniform transition charge was determined from the remaining revenues. The individual distribution rates were developed as follows: (1) the total revenue for each class was determined by applying the 1995 billing determinants to the base rates and 1997 levels for the fuel adjustment charge and the DSM adjustment; (2) the total revenue for each class was discounted by 10 percent; (3) from those amounts were subtracted (a) the transition revenues derived from the uniform transition charge described above, (b) the transmission revenues derived from the FERC transmission rate, (c) the mandated standard offer revenues and (d) the DSM and Renewables revenues derived from the Restructuring Act; (4) the distribution rates were designed to recover the remaining revenues; (5) all rate components were designed to achieve the 10 percent reduction for each customer bill.

The distribution rates for Commonwealth and Cambridge were adjusted further in compliance with the Department's order in D.T.E. 99-19, the BEC Energy/COM/Energy merger order. These adjustments resulted in increased distribution revenues to offset the higher mandated DSM expenditures required by the Restructuring Act that were not taken into account when calculating the initial transition charge level.

Information Request DTE-7-2

Mr. LaMontagne states that one of the goals of the Company's proposed standby rates is to ensure that prospective standby customers receive accurate price signals so that they can properly decide whether to install distributed generation. If the proposed standby rates are approved and a customer installs distributed generation under those rates, what level of confidence can that customer have that its standby and distribution rates will not change significantly at the time of the Company's next base rate case, affecting the economics of the customer's initial decision to install distributed generation.

Response

All of the Company's rate schedules are subject to change at the time of the next distribution rate proceeding. Therefore, there exists uncertainty for every customer regarding the level of rates in the future. This uncertainty will have an effect on every decision a customer makes regarding electricity consumption. The most important price signal a potential on-site generating customer can receive from a distribution rate perspective is the relationship between the otherwise applicable rate schedule and the standby rate schedule. Since the Company's proposal supports a fixed relationship between the otherwise applicable rate schedule and the standby rate schedule, if approved, this relationship will remain constant if future rate changes to the referenced rates occur. As a result, future changes in distribution rates will not affect a customer's initial decision to install on-site generation.

Information Request DTE-7-3

In reference to Exhibit NSTAR-HCL-9, at 1, please define "High Tension" and explain why no high tension investment data was provided for Commonwealth Electric Company.

Response

High Tension refers to service at voltage levels of 13.8 kV to 25kV. Commonwealth Electric does not have a stand-alone high tension service rate. Rather, customers who take service at high tension voltages do so under the available secondary service rate and receive discounts for transformer ownership and primary metering.

Information Request DTE-7-4

In reference to Exhibit NSTAR-HCL-9, at 2-4, please provide the worksheets that support the way each of the NSTAR electric companies derived the revised standby rates. Please also provide this information in electronic format.

Response

The Company has no other worksheets other than the exhibits to support the calculations. The calculations are self-explanatory. Attachment DTE-7-4 is the Excel spreadsheet supporting the exhibit.

NSTAR Electric
Distribution Investment

Cambridge Electric Light Company

Account #	Total	HT %	High Tension
360	$ 238,986	100.0%	$ 238,986
361	$ 2,292,009	100.0%	$ 2,292,009
362	$ 39,104,313	100.0%	$ 39,104,313
364	$ 2,843,356	0.0%	$ -
365	$ 6,390,879	0.0%	$ -
366	$ 17,761,100	54.0%	$ 9,590,994
367	$ 40,787,113	55.9%	$ 22,799,996
368	$ 4,204,632	0.0%	$ -
Total	$ 113,622,388	65.2%	$ 74,026,298
% Substations (Accounts 361+362)	36.4%		55.9%

Boston Edison Company

Account #	Total	HT %	High Tension
360	$ 6,666,161	100.0%	$ 6,666,161
361	$ 53,805,137	100.0%	$ 53,805,137
362	$ 236,845,789	100.0%	$ 236,845,789
364	$ 77,811,024	32.4%	$ 25,202,991
365	$ 219,144,667	29.7%	$ 65,173,624
366	$ 223,740,951	64.1%	$ 143,306,079
367	$ 737,621,688	64.1%	$ 472,446,691
368	$ 258,415,410	3.0%	$ 7,649,096
Total	$ 1,814,050,827	55.7%	$ 1,011,095,568
% Substations (Accounts 361+362)	16.0%		28.7%

Commonwealth Electric Company

Account #	Total
360	$ 2,888,527
361	$ 1,314,494
362	$ 52,840,345
364	$ 92,155,219
365	$ 138,370,104
366	$ 26,182,855
367	$ 73,096,796
368	$ 82,024,093
Total	$ 468,872,433
% Substations (Accounts 361+362)	11.6%

Note: 2003 FERC Form1 , PIS page 206

NSTAR Electric
Standby Rate Design

Commonwealth Electric - Distribution Demand Charges

Rate G-3		As filed	Revised	% Change	Supplemental Credit	
Standby Contract Demand < 1000					Units	% Credit
	All kVA	3.00	2.65	-11.6%	CD-Gen	88.4%
Standby Contract Demand > 1000						
	All kVA	3.00	3.00	0.0%	CD-Gen	100.0%
Rate G-2		**As filed**	**Revised**	**% Change**	**Supplemental Credit**	
					Units	% Credit
	All kVA	4.97	4.39	-11.6%	CD-Gen	88.4%

Note: % Change from Exhibit HCL-9

NSTAR Electric
Standby Rate Design

Boston Edison - Distribution Demand Charges

Rate G-3	As filed	Revised	% Change	Supplemental Credit	
Standby Contract Demand < 1000				Units	% Credit
Winter	5.58	3.98	-28.7%	CD-Gen	71.3%
Summer	11.66	8.31	-28.7%	CD-Gen	71.3%
Standby Contract Demand > 1000					
Winter	5.58	5.58	0.0%	CD-Gen	100.0%
Summer	11.66	11.66	0.0%	CD-Gen	100.0%
Rate T-2	**As filed**	**Revised**	**% Change**	**Supplemental Credit**	
Standby Contract Demand < 1000				Units	% Credit
Winter	8.18	6.87	-16.0%	CD-Gen	84.0%
Summer	17.51	14.71	-16.0%	CD-Gen	84.0%
Standby Contract Demand > 1000					
Winter	5.58	5.58	0.0%	CD-Gen	100.0%
Summer	11.66	11.66	0.0%	CD-Gen	100.0%
Rate G-2	**As filed**	**Revised**	**% Change**	**Supplemental Credit**	
Standby Contract Demand				Units	% Credit
Winter	12.42	10.43	-16.0%	CD-Gen	100.0%
Summer	24.26	20.38	-16.0%	CD-Gen	100.0%

Note: % Change from Exhibit HCL-9

NSTAR Electric
Standby Rate Design

Cambridge Electric - Distribution Demand Charge

Rate G-3	As filed	Revised	% Change	Supplemental Credit			
Standby Contract Demand < 1000				Gen Output	Units	% Credit	Added kVA
First 100 kVA	0	0	-55.9%	<100	CD-100	44.1%	100-Gen
Over 100 kVA	1.47	0.65	-55.9%	>100	CD-Gen	44.1%	0
Standby Contract Demand > 1000							
First 100 kVA	0	0	0.0%	<100	CD-100	100.0%	100-Gen
Over 100 kVA	1.47	1.47	0.0%	>100	CD-Gen	100.0%	0

Rate G-2	As filed	Revised	% Change	Supplemental Credit			
Standby Contract Demand < 1000				Gen Output	Units	% Credit	Added kVA
First 100 kVA	2.98	1.90	-36.4%	<100	CD-100	63.6%	100-Gen)*27.5%
Over 100 kVA	3.95	2.51	-36.4%	>100	CD-Gen	63.6%	0
Standby Contract Demand > 1000							
First 100 kVA	2.98	2.98	0.0%	<100	CD-100	100.0%	100-Gen
Over 100 kVA	3.95	3.95	0.0%	>100	CD-Gen	100.0%	0

Information Request DTE-7-5

In reference to Exhibit NSTAR-HCL-10, M.D.T.E. No. 138, please explain why the 20 percent threshold limit does not apply to installed generation units with a combined nameplate rating level greater than 500KW? How was the 500 KW limit derived?

Response

The Company set the threshold at 500 kW because at that level the distribution system planners generally take specific consideration of the load served by customer generation when designing capacity requirements for distribution circuits.

Information Request DTE-7-6

Please refer to Exhibit NSTAR-HCL-9, at 2-4. For each of the NSTAR electric companies, please provide all reasons why the Company proposes to provide a discounted rate compared with the rates in the original filing.

Response

Please refer to Exhibit NSTAR-HCL-7, rebuttal testimony of Henry C. LaMontagne, at pages 21 and 22.

Information Request DTE-7-7

Refer to Exhibit NSTAR-HCL-7, at 25, lines 15-21. Please explain the reasons why NSTAR Electric has modified the initially proposed "grandfather" provision from those customers who began satisfying all, or a portion of, their internal load requirements from their own generation facilities before the "filing date" to before the "effective date" of the proposed tariffs.

Response

The Company revised the date for "grandfathering" existing on-site generation customers in order to provide additional notice time to customers contemplating or planning the installation of on-site generation during the pendancy of this proceeding.

Information Request DTE-7-8

In reference to Exhibit at 14, lines 7-8, please provide a formulaic definition of "average demand" and define "customer's usage."

Response

The term "average demand" in the referenced testimony means the average monthly billing demand and is defined as the sum of the 12 monthly billing demands in the annual period divided by 12. The term "customer usage" refers to the customer's monthly billing demands.

Information Request DTE-7-9

In reference to Exhibit NSTAR- HCL-8 of LaMontagne's Rebuttal, please define "MaxBQ" and "AvgBQ."

Response

The term "MaxBQ" refers to the highest monthly billing demand in the annual period. The term "AvgBQ" refers to the arithmetic average of the monthly billing demands in the annual period.

Information Request DTE-7-10

Please reconcile the apparent inconsistency between the use of "Average/Max billing demand ratio" in Exhibit NSTAR-HCL-7, at 14-15 compared with the "MaxBQ/AvgBQ" ratios shown in Exhibit NSTAR-HCL-8.

Response

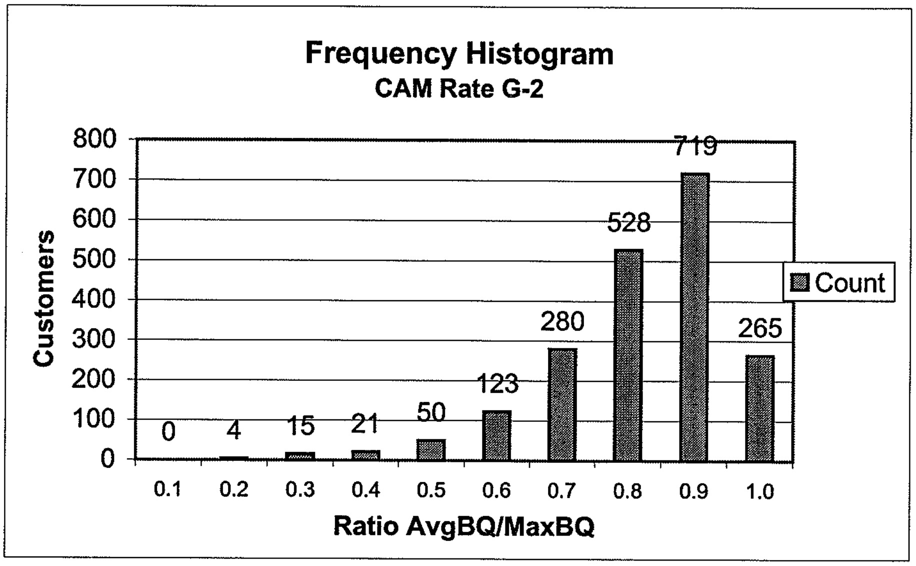
The labels describing the information presented on the exhibit are incorrect. The labels should read "AvgBQ/MaxBQ". See Transcript 1, page 18.

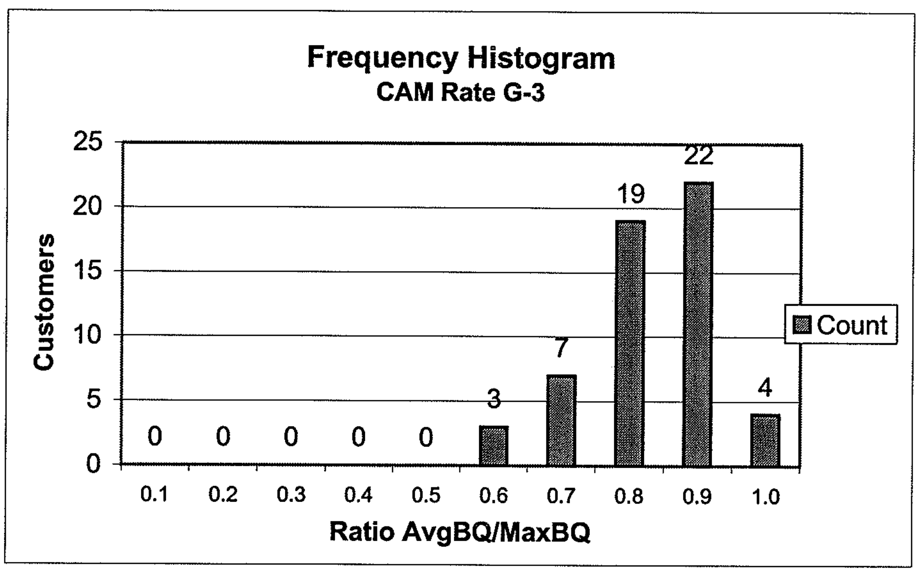
Information Request DTE-7-11

Please provide in an electronic readable medium (Microsoft Excel) the data and calculations used to developed the frequency histograms shown in Exhibit NSTAR-HCL-8.

Response

Please refer to Attachment DTE-7-11.


Frequency Histogram
CAM Rate G-2
Customers
800
700
600
500
400
300
200
100
0
0
4
15
21
50
123
280
528
719
265
Count
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Ratio AvgBQ/MaxBQ


Frequency Histogram
CAM Rate G-3
Customers
25
20
15
10
5
0
0
0
0
0
0
3
7
19
22
4
Count
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Ratio AvgBQ/MaxBQ

Information Request DTE-7-12

In reference to Exhibit NSTAR-HCL-7, at 15, lines 14-15, please elaborate on and provide any study or data in support of the assertion that "[u]nder this structure, the contract demand will not exceed the lowest monthly billing demand."

Response

Please refer to the Company's response to Information Request TEC-3-3. Since the demand associated with the baseload level is lower than the lowest monthly billing demand, the contract demand will always be lower than the customer's internal load requirement. This means that there will be a supplemental demand billed every month under the proposed standby rate. Consequently, the combination of the contract demand and the supplemental demand for the standby customer with on-site generation will be identical to the monthly billing demand of the same customer without on-site generation.

Information Request DTE-7-13

Please provide for each of the NSTAR Electric companies a schedule similar to Exhibit NSTAR-HCL-9, at 1 using the distribution investments during the test years for the existing base rates.

Response

Please refer to the Company's response to Information Request AG-2-13.